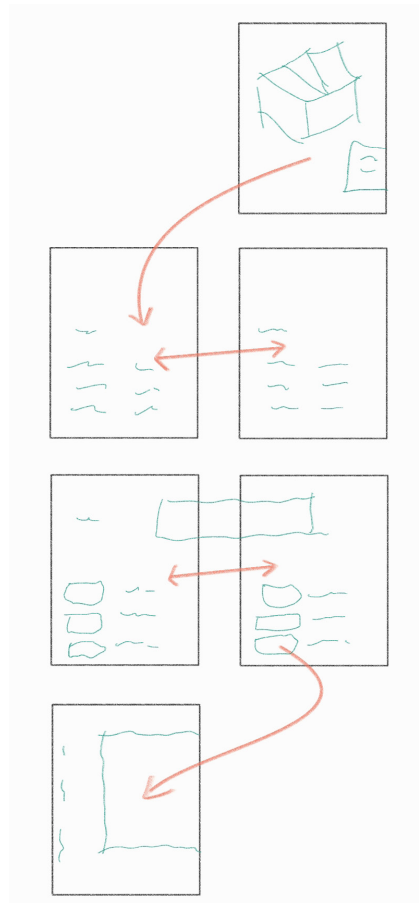


# ARCHITECTURAL PORTFOLIO

OWEN ANDREWS

ARCHITECTURAL AND BUILDING  
TECHNOLOGY STUDENT



NOTE.  
PDF VERSION BEST  
VIEWED WITH 2 PAGE  
VIEW AND COVER PAGE  
TO ACCOMMODATE  
2-PAGE SPREADS

## EDUCATION

BCIT ABT 2023-2025  
Architectural and Building Technology  
Program

UNIVERSITY OF VICTORIA 2020-2022  
General Engineering, completed 22  
credits before transferring to BCIT

Mount Douglas Secondary 2020  
Graduated from the Challenge gifted  
academic Program

## Design

Architectural Technology	88%
Site Responsive Design	95%
Graphic Communication	93%
Building Construction 3	82%

## SOFTWARE

Architectural CAD	88%
Autodesk Revit 1	82%
Computer applications	91%

## WORK EXPERIENCE

Giant Victoria 2022-2024

Engaged with customers to spec and build race and performance bicycles.  
Applied technical knowledge to maintain, repair, and build bicycles.  
Conducted in-depth research on components, materials, and compatibility, enabling clear and effective communication of technical information to both clients and industry professionals.

Construction 2018-2019

Worked with a Red Seal carpenter to construct multiple buildings.  
Applied joinery skills with hand tools and shop equipment to create high-quality furniture pieces.  
Received training in multiple disciplines including plumbing, sheet metal fabrication, and welding.

## PERSONAL SKILLS

HARDWORKING - TIME MANAGEMENT  
- CAD SKILLS - MECHANICAL  
APTITUDE - WOOD FRAMING -  
JOINERY - SEWING

## HOBBIES

CYCLING - CAMPING - VIDEO  
GAMES - SCIENCE FICTION -  
WOODWORKING

## CONTENT



06

### LIGHTBOX HOUSE

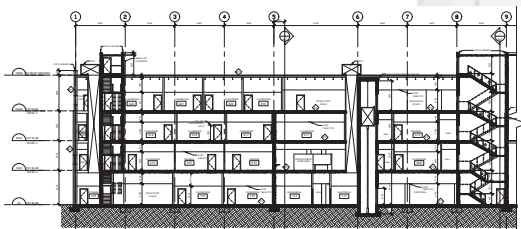
A laneway house for a photographer



10

### URBAN ARROYO

Project still in development. A mixed use  
Residential building for urban farming

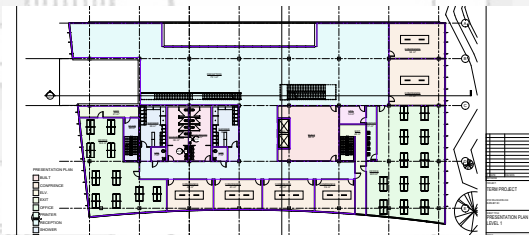


14

### AUTOCAD

Drafting projects completed in Autocad





# 15

## REVIT

Projects leveraging Revit



# 16

## SKETCHES

Several hand drawn examples, including drafting and sketching



# 20

## OTHER PROJECTS

Projects outside of architecture

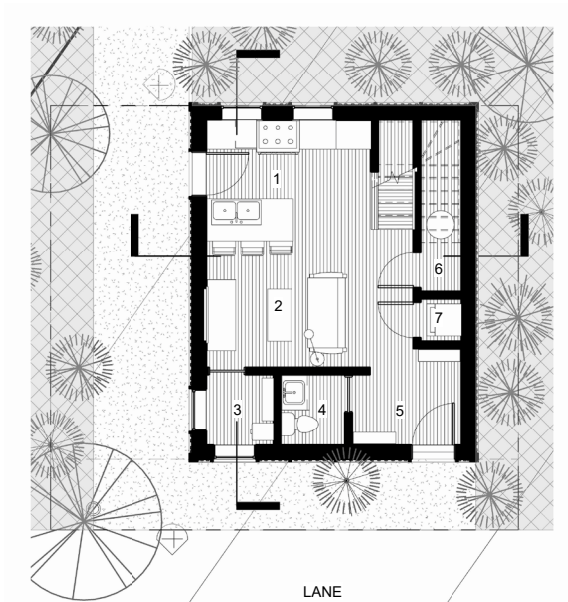


# LIGHTBOX HOUSE

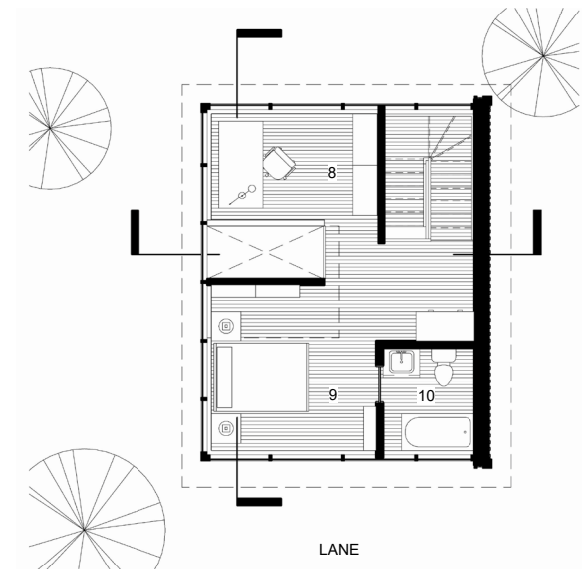
House for a photographer



LB



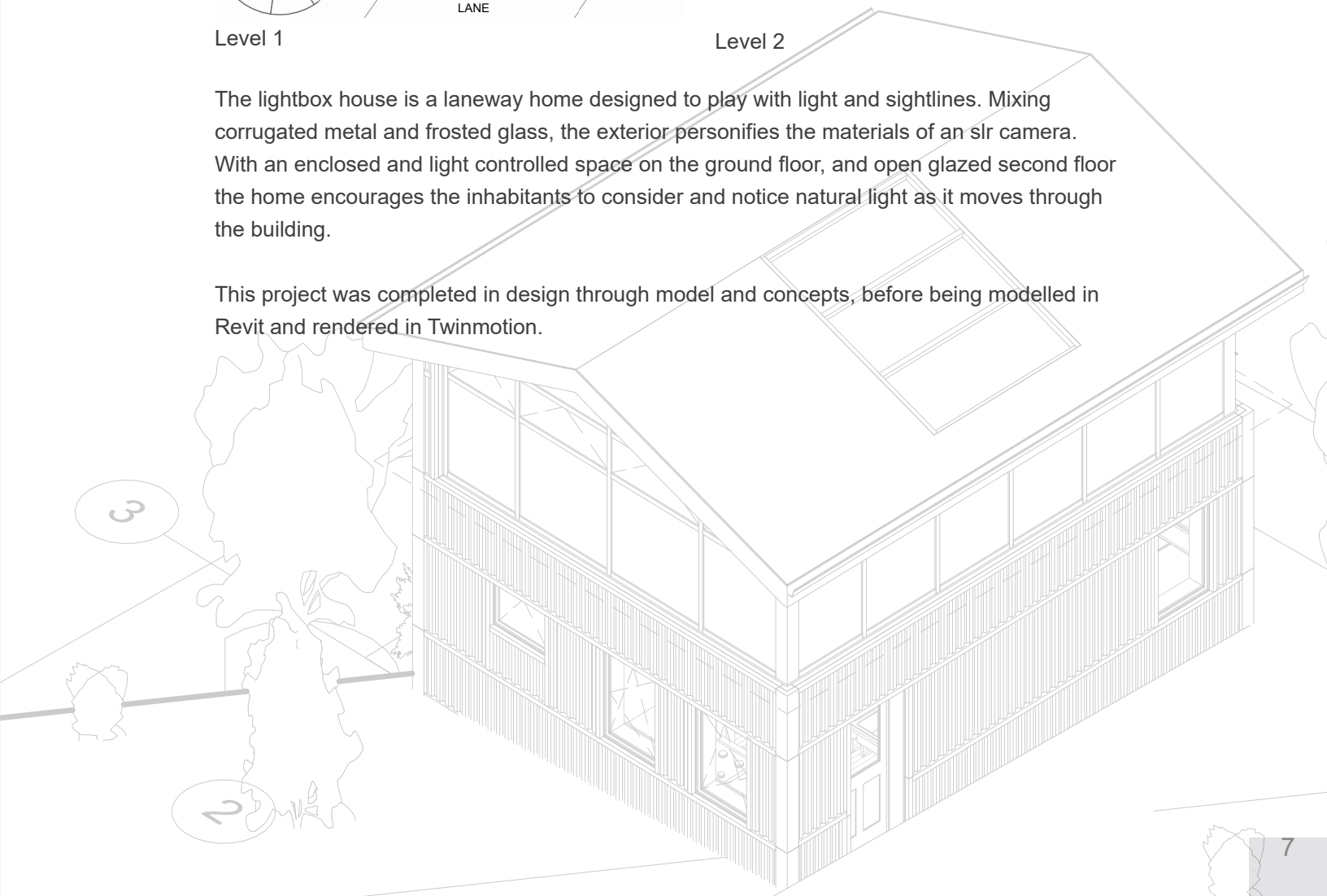
Level 1



Level 2

The lightbox house is a laneway home designed to play with light and sightlines. Mixing corrugated metal and frosted glass, the exterior personifies the materials of an slr camera. With an enclosed and light controlled space on the ground floor, and open glazed second floor the home encourages the inhabitants to consider and notice natural light as it moves through the building.

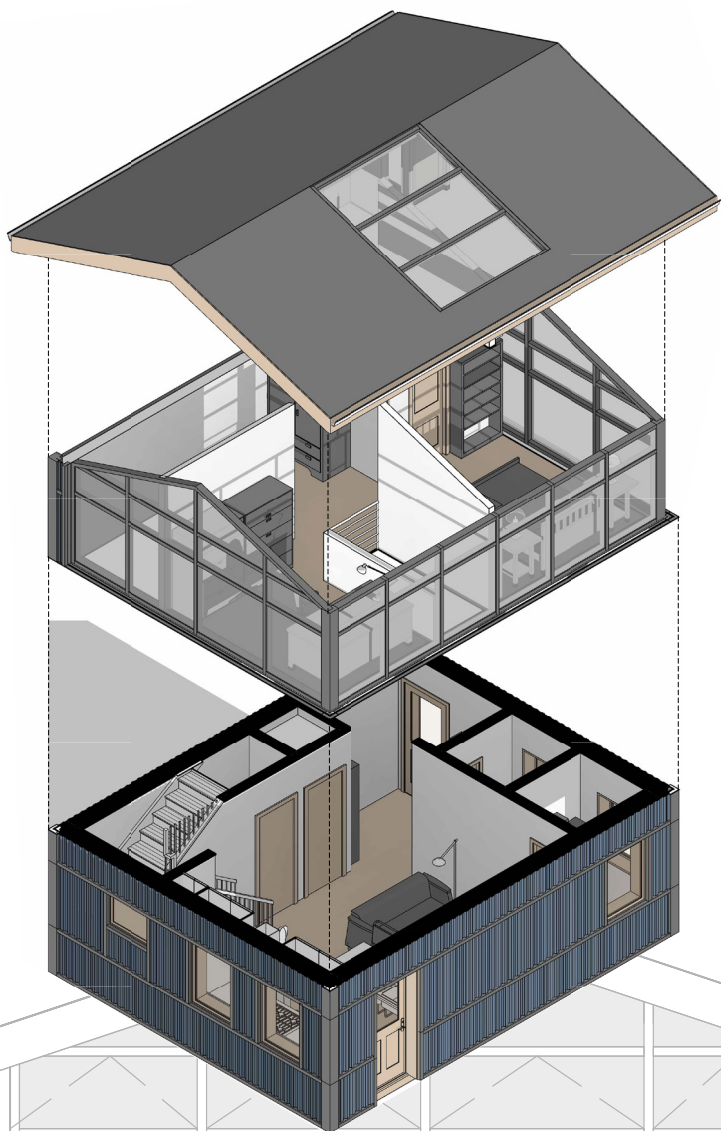
This project was completed in design through model and concepts, before being modelled in Revit and rendered in Twinmotion.





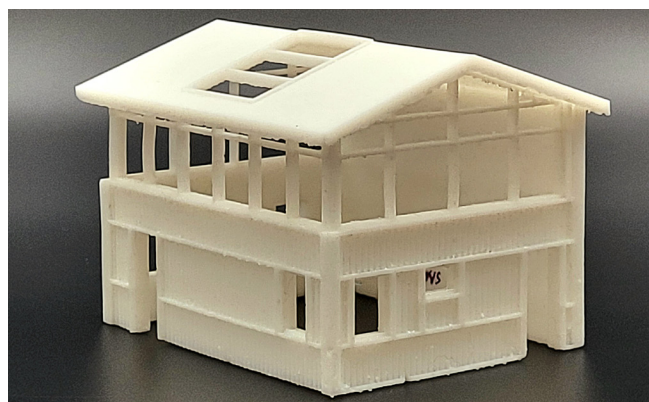
## DISPLACED VIEW

While the levels have different levels of glazing, both floors are connected by the open to below, that brings light from the skylight down through the structure.



## CONCEPT MODEL

Constructed like a traditional paper lamp, the concept model plays with translucency.



## 1/8th MODEL

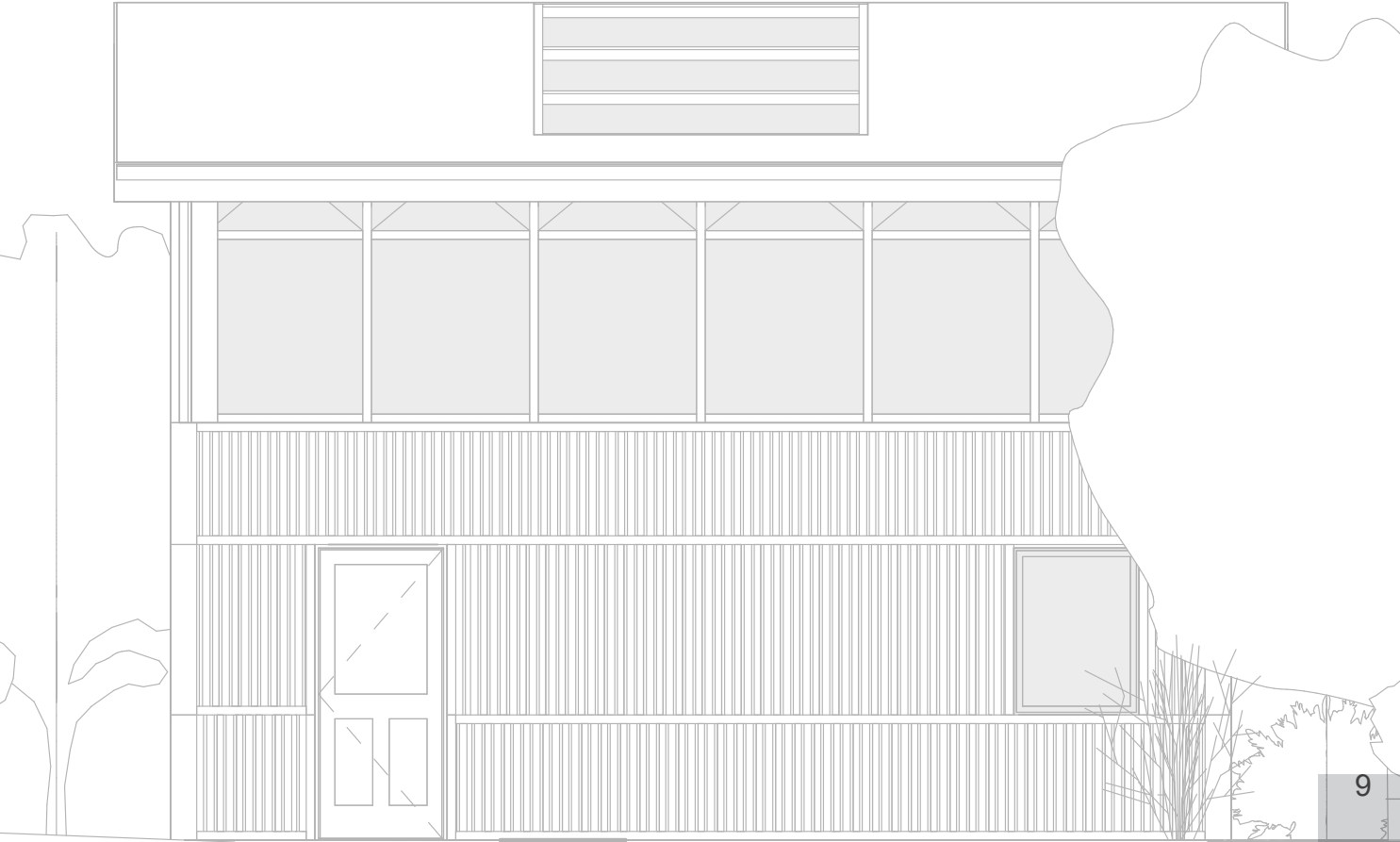
SLs printed, the final model shows the texture and material contrast between upper and lower floors.



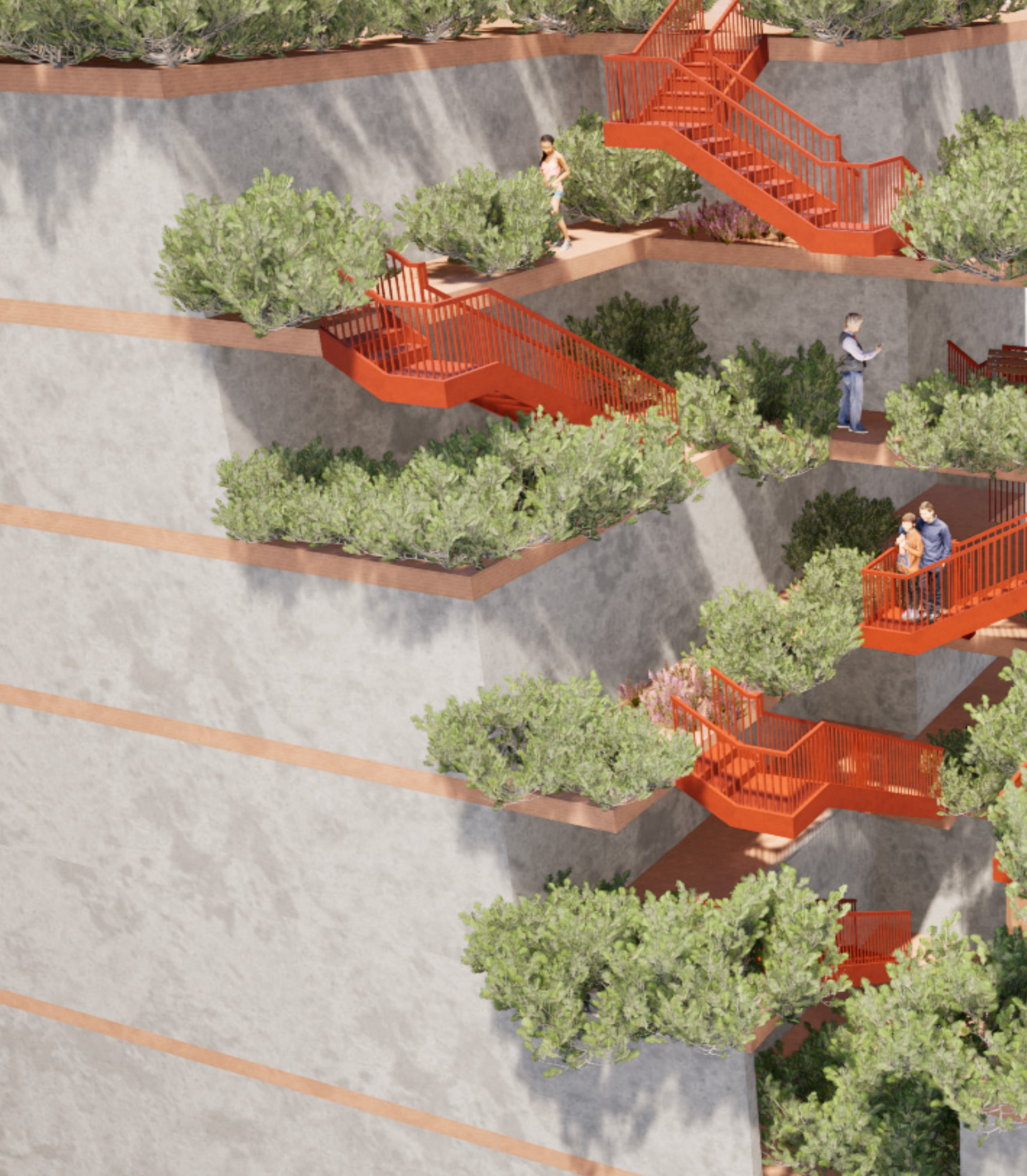


SECTIONS

The section cuts were chosen to show the connections between the levels. The open to below and staircase serve as light wells and central points for the space.







CONCEPT  
RENDER

Project still in development.  
Partner project with Zoya Haque.

MODEL

Modeled in Revit  
by Zoya Haque





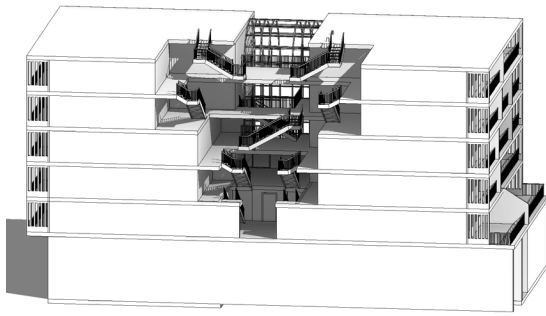
## URBAN ARROYO

Mixed use farming focused  
residential building

RENDER

Rendered in Twinmotion  
by Owen Andrews



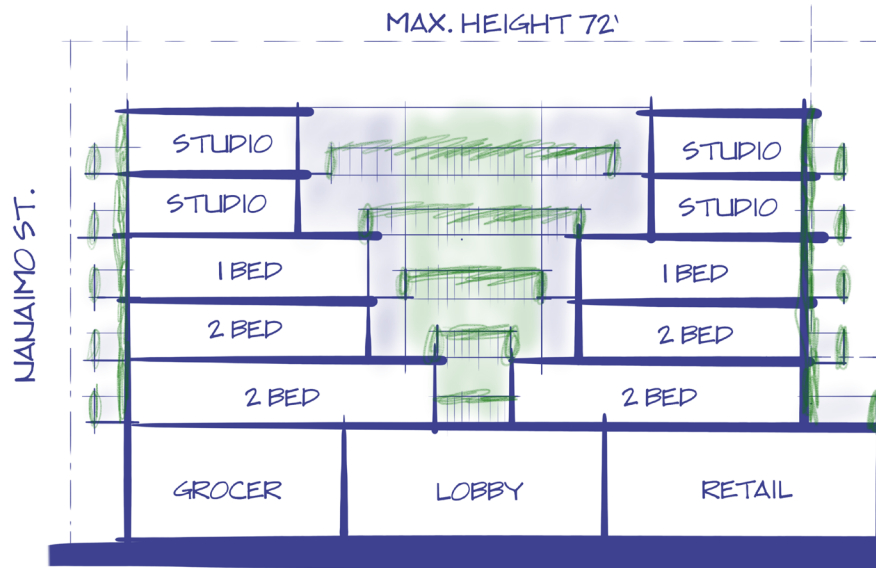


Revit

Early Revit model, still being developed.

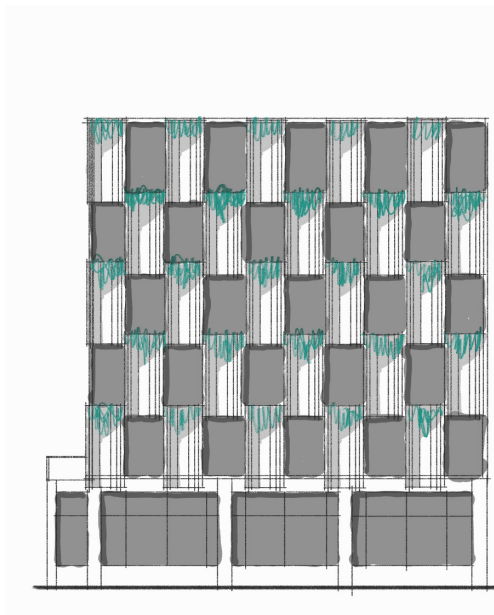
## SECTIONS

Early development sections, showing the central green house that the building is wrapped around.



## SECTION A

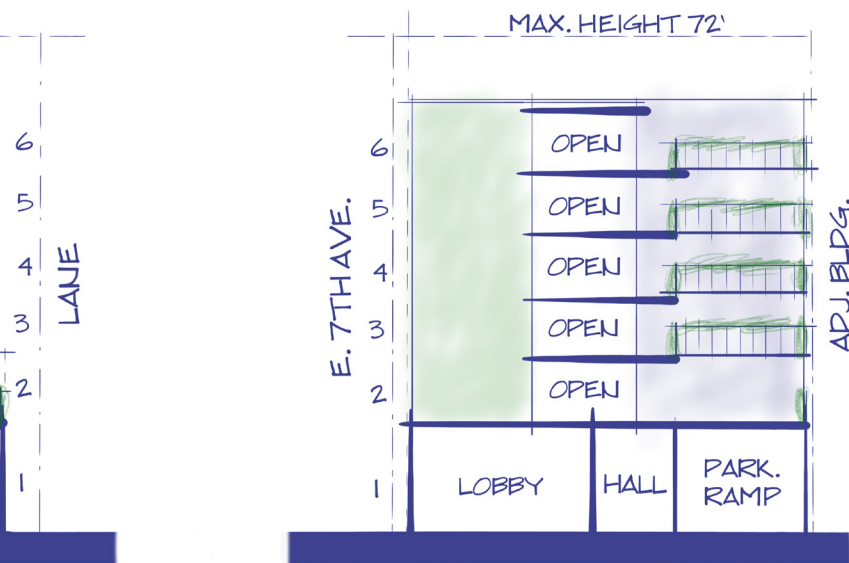
1/16" = 1'-0"



## ELEVATION

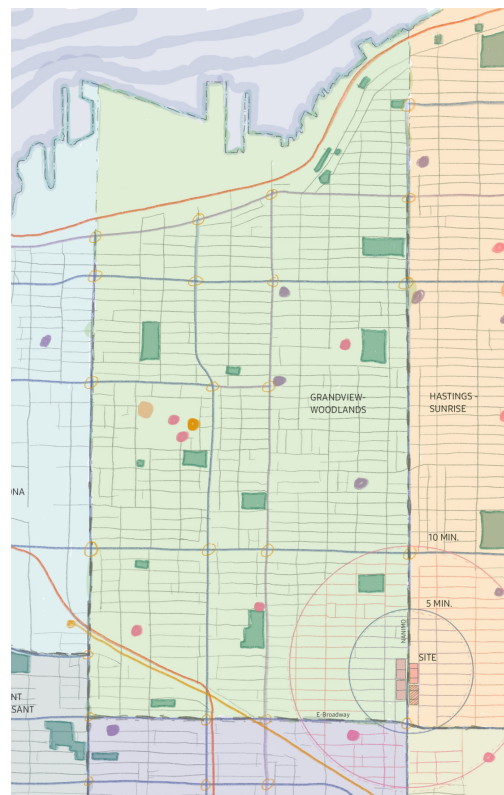
Elevation concept, showing emphasis on planting, developed prior to the integration of the central greenhouse.





### SECTION B

1/16" = 1'-0"



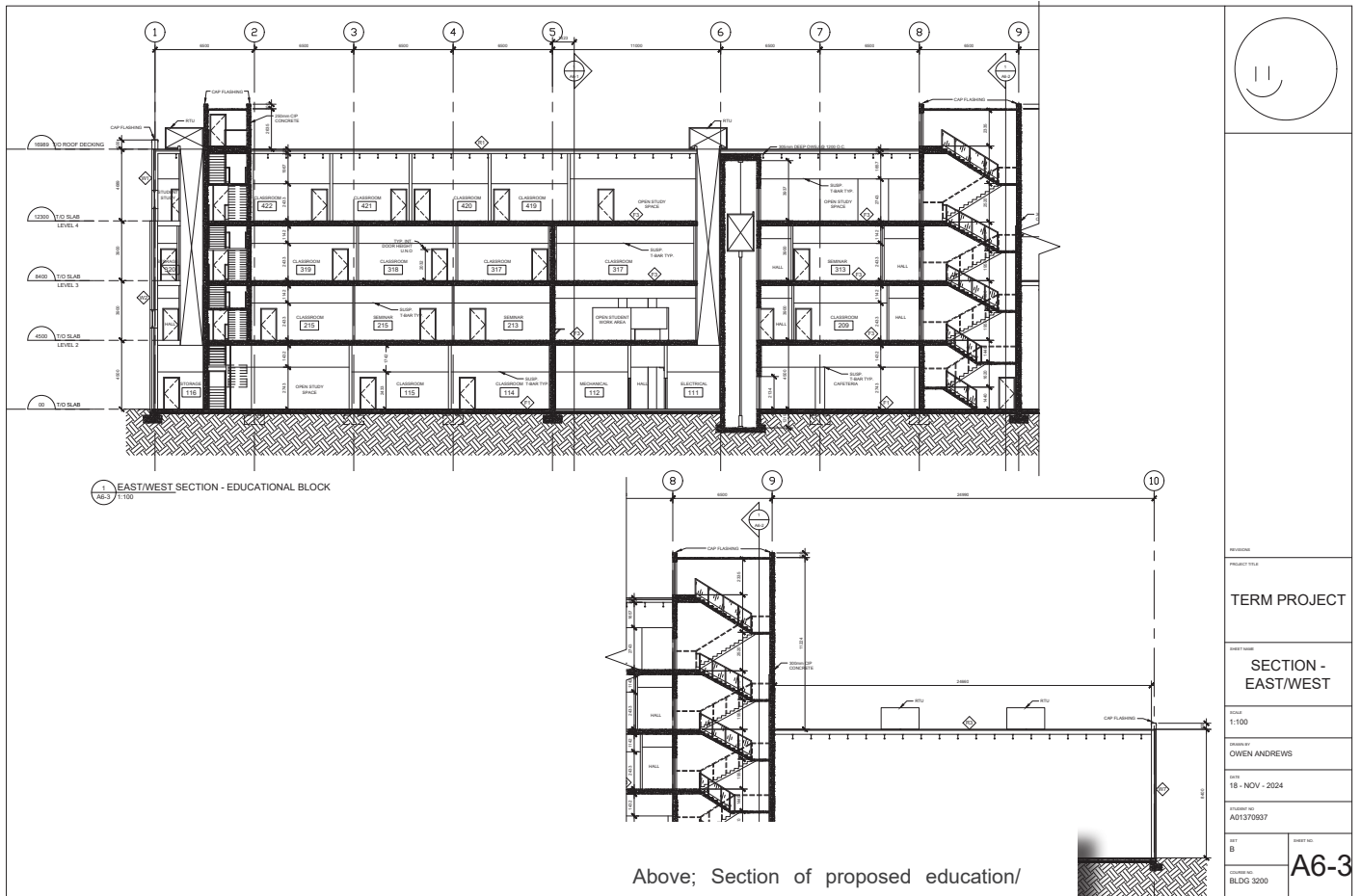
### URBAN CONTEXT

Hand drawn diagram of urban context and surrounding city.



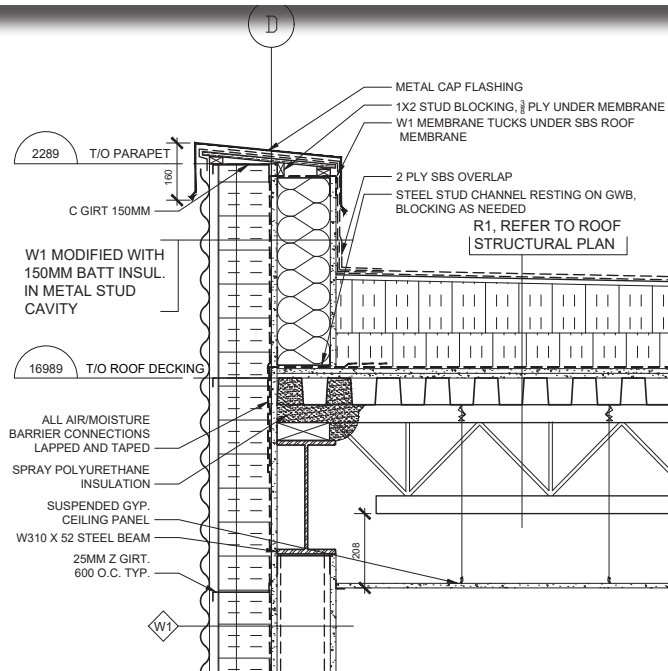
### CONCEPT MODEL

Created with laser cut cardboard and acrylic, the model simplifies the form to emphasise how light is brought into the core of the building and the central garden space.



AUTOCAD

Above; Section of proposed education/  
shop building.  
Below; Detail of parapet insulation and  
membrane continuity.



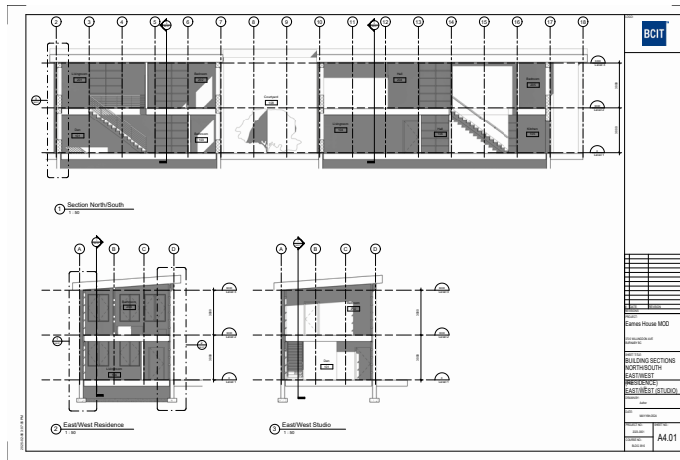
PROJECT  
**BCIT ENERGY AND ADVANCED  
VEHICLE TECHNOLOGY CENTER**

DRAWING TITLE  
**PARAPET DETAIL**

SCALE 1:10  
DATE 02/12/2024  
DRAWN BY OWEN R. ANDREWS

REVISION NO. 1  
SHEET NO. A7-3



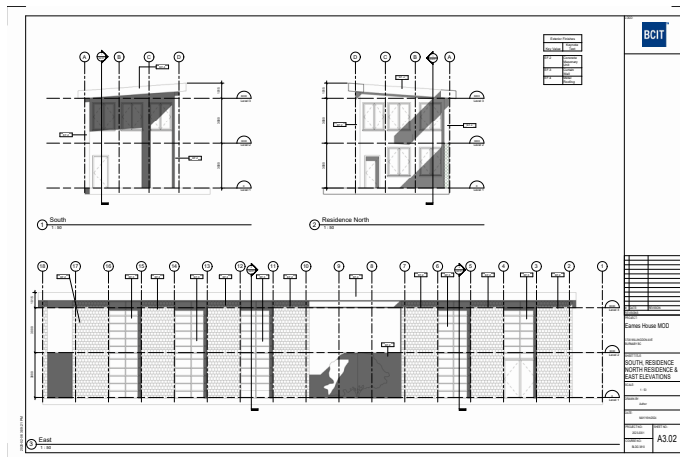


REVIT

Eames House inspired building, and Office Building plans.

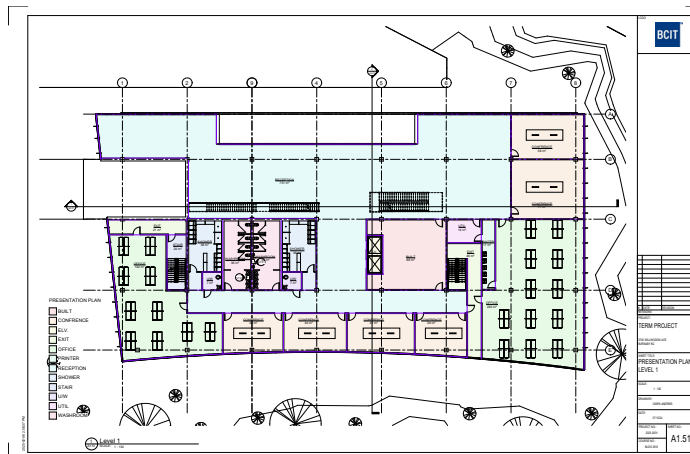
## SECTIONS

Sections of Eames inspired house



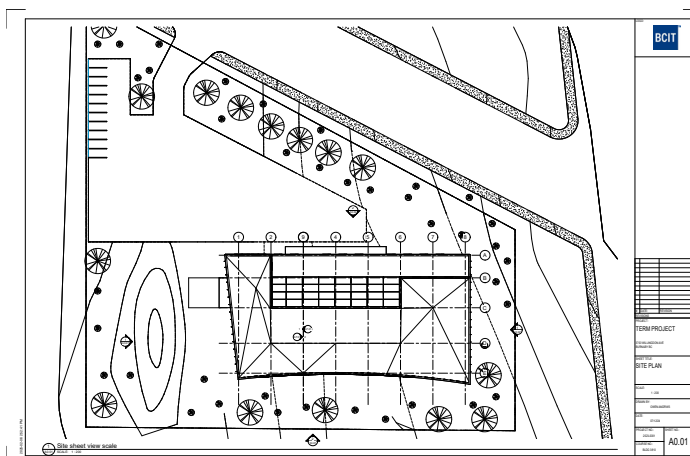
## ELEVATIONS

Elevations of Eames inspired house



## PRESENTATION PLAN

Presentation plan of proposed office building



## SITE PLAN

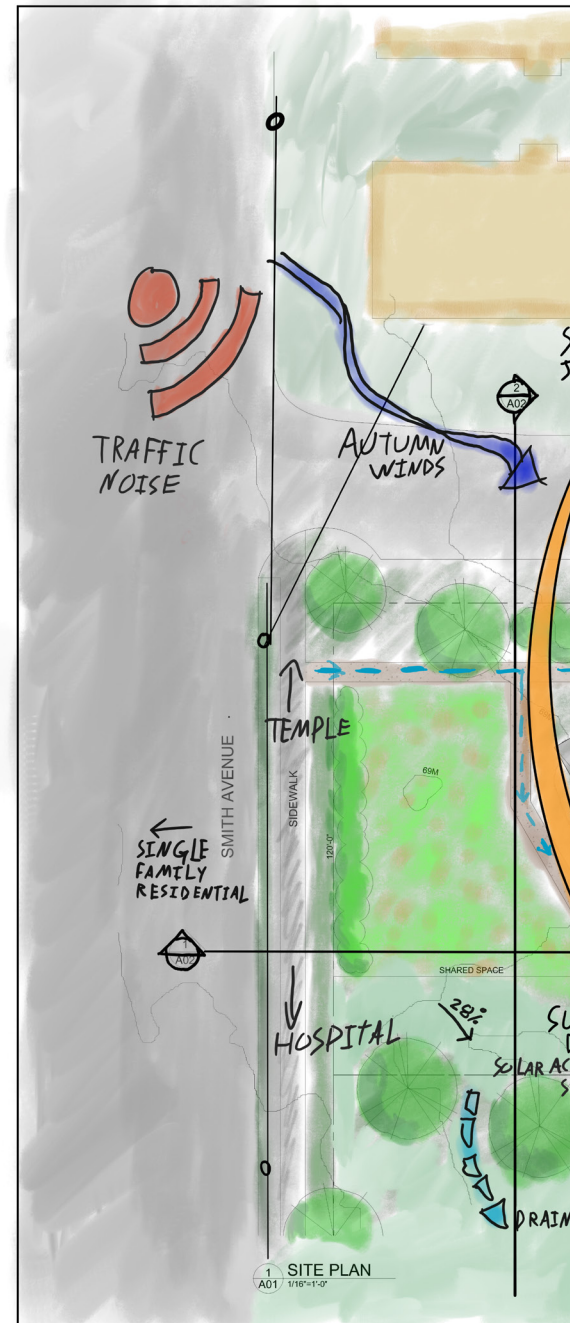
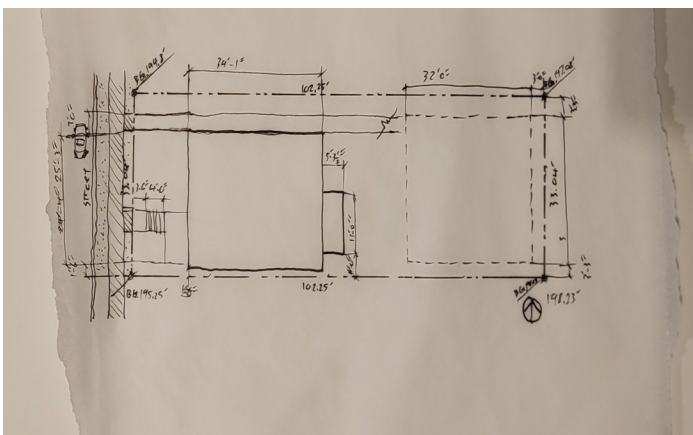
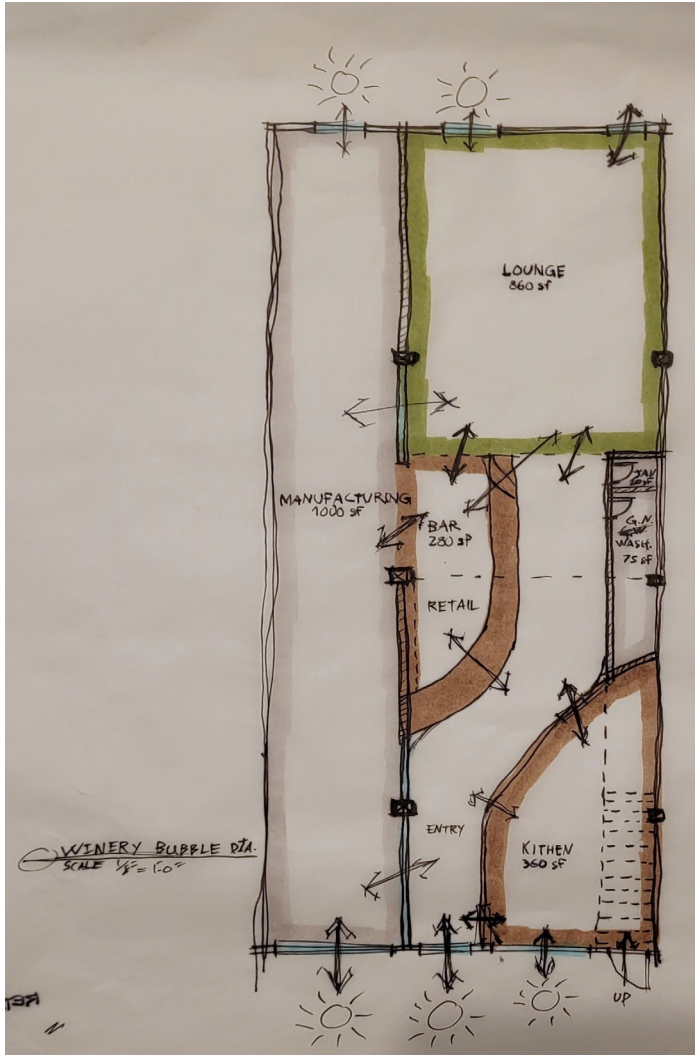
Site plan with modeled topography of proposed office building

## SKETCHES

Sketches and hand drafted plans.

### SPACE PLAN

Bubble diagram/space plan for proposed tenant improvement winery project.

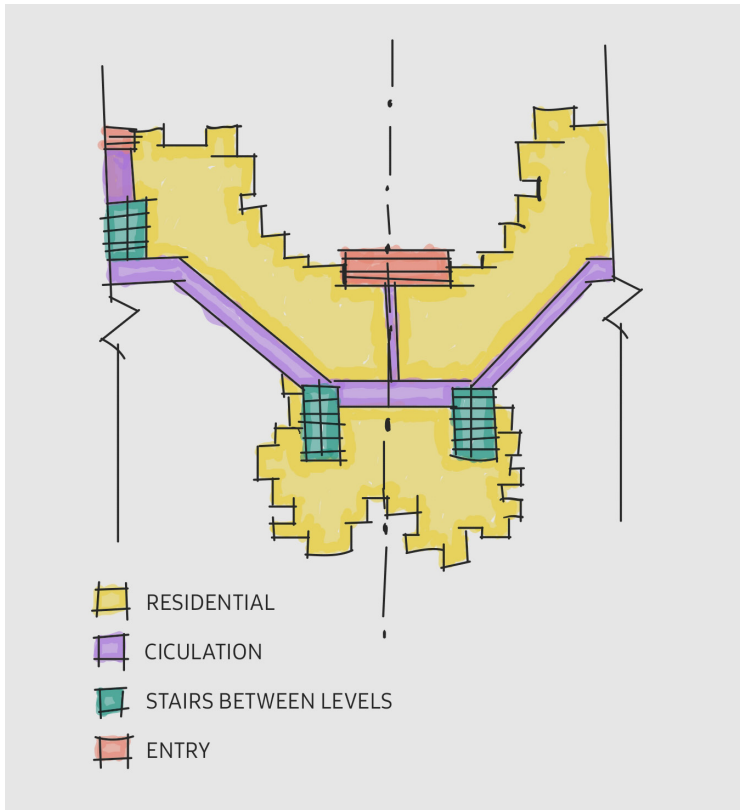


### SITE DIAGRAM

Hand drawn layout of site size and setbacks.

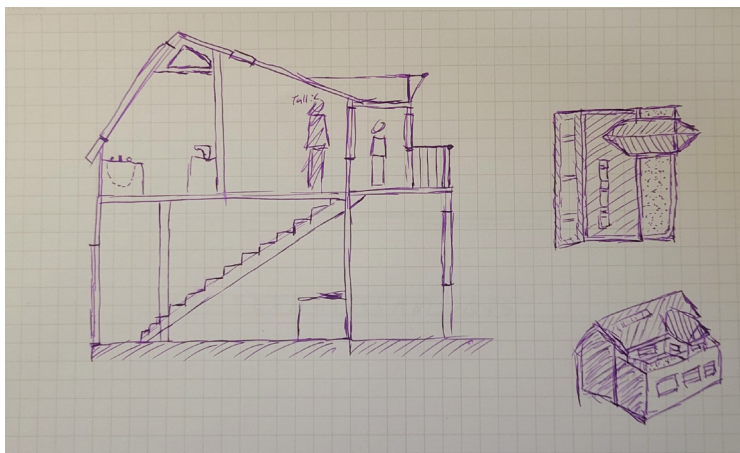






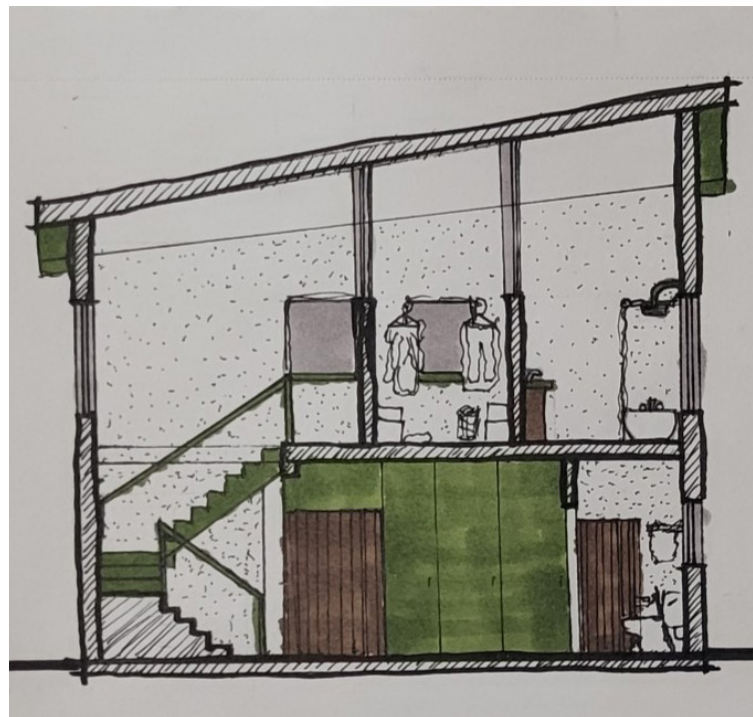
## CIRCULATION DIAGRAM

Circulation diagram of a section of Habitat 67 designed by Moshe Safdie.



## CABIN SKETCH

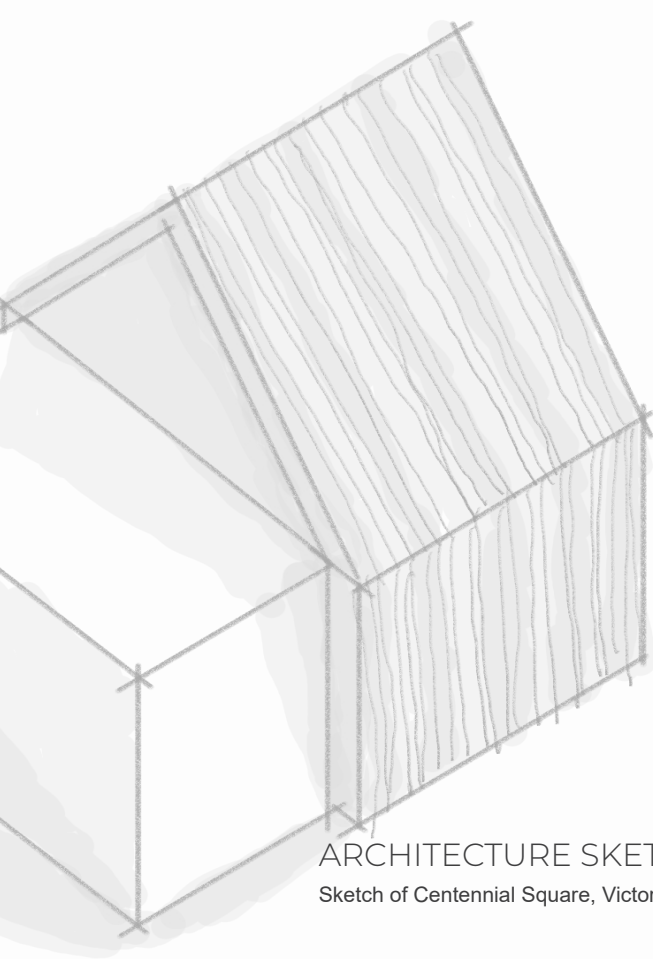
Sketched section and exteriors of a small cabin, pretty sure this was during a physics lecture.



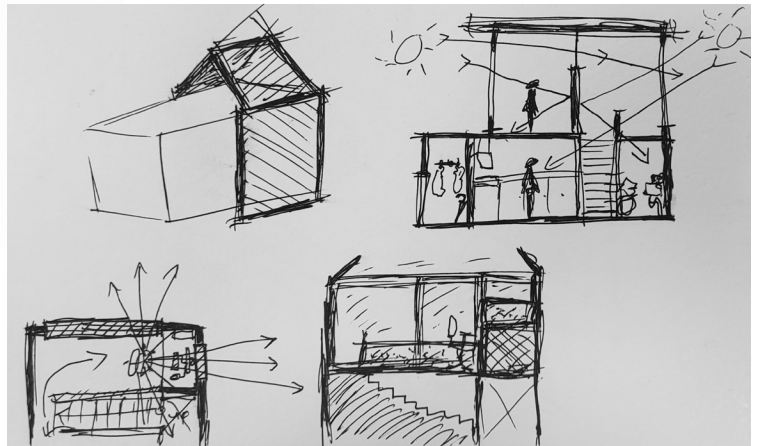
## LIGHTBOX HOUSE

Early development sketches of the laneway house featured above.





ARCHITECTURE SKETCH  
Sketch of Centennial Square, Victoria BC



LIGHTBOX SKETCH  
Iadiation sketches for Llightbox house.





## OTHER PROJECTS

Left to right:

Oak stool with paracord seat, based on design by Modernbuilds.

Cargo backpack, patterned and sewn from own design, intended to be a waterproof cargo carrying backpack.

Wooden sword, made from a single piece of mahogany with a carved cherry guard, over 5 ft in length.

Bar bag, sewn with hmwpe reinforced ripstop, lightweight and extremely durable.







## BIKE

After riding bikes since I could walk, and working in bike shops for 4 years, I decided to create my perfect bike.

While I can go into excruciating detail about brass spoke nipples and free hub ratchets, the most important factors are material choice and fit.

Built around a refinished 2003 Lemond Victoire titanium frame, with Carbon fork and alloy wheels, every aspect of this bike was built for my riding style, preferences, and fit.

I purposely avoided modern high performance parts in favour of serviceability and longevity, as I intend to ride this bike for a long, long time.





